



SAVE THE TASMANIAN DEVIL.

FREE NEWSLETTER

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Caught on camera

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Tasmania Zoo FRE

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Planning to save the devil

ROUTE CHOSEN FOR FENCING PROPOSAL

A feasibility study into a possible broad-scale fencing project in north-western Tasmania has been completed for the Save the Tasmanian Devil Program.

A barrier fence would break the transmission cycle of the Devil Facial Tumour Disease (DFTD) and protect healthy devil populations on the Woolnorth farming property, which is owned by the Van Diemen's Land Company. But Steve Harris, senior policy analyst with the Program, said it has also been important to assess the potential impacts of the structure.

"We've completed the feasibility study and we're confident that we could build a quarantine-standard fence that could do the job we want," Steve said.

"But there's still a bit more work to do to ensure that we don't impact the heritage of the landscape or operations of the farm. You don't create problems to fix problems."

The design and cost of the fence itself was




Moo: The cows take a keen interest in the devil monitoring that's been taking place at Woolnorth.

further discussed at a recent workshop in Hobart, featuring collaboration between fence builders and wildlife experts.

Dr Samantha Fox, a wildlife biologist with the Save the Tasmanian Devil Program, recently walked the route of the proposed fence with Steve Harris and Program manager, Andrew Sharman.

"The construction of more than 12km of fencing is a big project and an expensive option," Sam said. "But when you think about that money in terms of the cost per devil, then it could be great value.

"On top of that, a fence means the devils remain completely wild. They look for food, raise their young and have lots of room to roam—all the things devils normally do."

"So, with careful planning and consultation, the fence can be a win/win situation for everybody involved." 

6233 2006

Is there a devil in your chicken coup? Have you spotted an animal with the Devil Facial Tumour Disease (DFTD)? Would you like to report devil road kill?

If you want to talk devils for any reason, then there's one phone number to remember! **6233 2006** is the one-stop phone number for all devil inquiries and reports.

We're particularly keen to receive your updates about any living devils that you observe suffering with DFTD. Dr Sarah Peck, veterinary officer with the Save the Tasmanian Devil Program, said she recently had a number of calls from members of the public about devils with advanced cases of DFTD, which were found on peoples' property.

"The devils were in very poor body condition with advanced disfiguring tumours," Sarah said. "Having examined the devils, they were euthanized and a necropsy carried out.

"This gives us the chance to relieve their suffering. In addition, the samples collected at necropsy provide valuable information about how DFTD is changing in different locations around Tasmania. This information is vital to understanding the behaviour of the disease, informing us on how best to focus efforts to manage it."

So write it down... **6233 2006.** 

FROM THE MANAGER'S DESK

We are currently at the halfway mark of the Save the Tasmanian Devil Program and we're approaching some big decisions—for instance, evaluating the feasibility of projects such as island translocation, large fences across the landscape that isolate and conserve populations of healthy devils (virtual islands), and the reintroduction of devils back into areas that have been decimated by the Devil Facial Tumour Disease (DFTD).

Not one of these projects can be approached lightly as they involve significant resources or actions that will be difficult to reverse. We're determined that any action we take over the next two years is underpinned by the best information available to us at the time. We don't have all the answers. However that doesn't, and shouldn't, prevent us from making decisions. As the old saying goes... *he who hesitates is lost*. And in this instance, what we stand to lose are the last wild Tasmanian devils.

We know there are gaps in our information, but that doesn't prevent us from acting, evaluating and responding as new information comes to hand. We need information on the disease, the devil population in the wild, the Insurance Population and the ecosystem impacts caused by declining devil numbers in the Tasmanian landscape.

We currently obtain this information through a range of monitoring, management and research programs, as well as a growing number of collaborations and partnerships with external organisations. For this reason we already have a fantastic (and expanding) knowledge base on DFTD, devil genetics, captive breeding strategies and the status of wild populations across Tasmania. But our focus remains on increasing this knowledge base to develop management strategies that secure the long-term survival of the devil in the wild, including:

- Recording changes in devil numbers as DFTD spreads across the State (such as whether there is local extinction, the location of the disease front, and identifying any atypical population responses to the disease);
- Monitoring the evolution of DFTD from tumour samples collected at different sites (looking at whether the various tumour strains behave differently, and if there have been changes in tumour strains within regions); and,
- Understanding the ecological consequences of declining devil numbers across Tasmania (and developing strategies to minimise these negative impacts).



This newsletter provides a snapshot of some of our most recent surveys. It includes visits from Southern Boobooks on Maria Island, as well as some new insights into the remaining populations of devils in the north-east of the State—the area where DFTD was first detected. We also drop by the site that will soon house our fourth Devil Island Free Range Enclosure.

Finally, on a more personal note, I'd like to acknowledge our Communications Consultant Kim Nolan, who recently moved on from the Program. Kim made a huge difference to the way the Program looks and communicates, and we wish her all the best in the future. 🐛

ANDREW SHARMAN
Manager
Save the Tasmanian Devil Program

THE STORY SO FAR...

The Devil Facial Tumour Disease (DFTD) is a new, contagious cancer that kills all infected devils. Since DFTD was first observed in 1996, devil numbers have declined by around 80%.

DFTD produces small lumps in and around the mouth, which develop into large tumours on the face and neck. Death follows as a result of starvation and the breakdown of bodily functions.

It is believed that DFTD is transmitted from animal to animal through biting. The foreign cells of the tumour aren't recognised or rejected by the individual animal, in part because of the general lack of genetic variation within the population.

The disease front has moved in a south-westerly direction across more than 60% of Tasmania, although there's no evidence that it has yet reached the far north-west.

The Tasmanian devil is listed as 'Endangered' under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*, and the Tasmanian Government's *Threatened Species Protection Act 1995*.

The Save the Tasmanian Devil Program is the official joint strategy of the Australian and Tasmanian Governments. It features captive and free-ranging Insurance Populations, and collaborative laboratory-based investigations of DFTD.

WHO WE ARE

The Save the Tasmanian Devil Program is the official response to the threat of DFTD to the survival of the Tasmanian devil. The Program is a joint initiative of the Australian and Tasmanian Governments.



Australian Government



Tasmanian Government

POPULATIONS PERSIST AT 'GROUND ZERO'

Tasmanian devil populations are persisting in north-eastern Tasmania, a 20-day landscape scale Site Occupancy survey in February confirmed.

Sam Thalmann, a wildlife biologist with the Save the Tasmanian Devil Program, said 30 remote cameras were placed in a grid across 300,000 ha of land (basically the whole north-eastern tip of the State).

This region is 'ground zero' for the Devil Facial Tumour Disease (DFTD). It was at Mt William in 1996 that the disease was first observed. The time frame of the survey is also crucial because it marks the 15-year period in which some scientific models predicted that the local extinction of devils may occur.

"Our cameras detected devil presence at 19 locations," Sam said. "That means that devils were observed at 67% of the sites that we surveyed. Some sites detected a single devil, while others captured numerous individuals.

"This is pretty exciting because



A diseased devil caught on infra-red camera.

it means there's no evidence of extinction in those north-eastern areas. Numbers are down, but the key point is that devil populations are persisting."

The devil population at Mt William National Park has been studied for many years, mostly through 'trap and release' methods. This traditional form of monitoring has provided precise information on the small Mt William population. But February's remote-camera survey is the first to inform on what's happening in the larger area.

Remote, weather-proof cameras (triggered by passive infra-red sensors) captured images of Tasmanian devils, which were lured into view by scents, fresh bait and artificial latrines.

The unique blazing and scarring patterns on the photographed devils were used to help identify individual animals at each site, allowing researchers to estimate a minimum total of 34 devils across the region. The photographed devils predominantly looked like one- and two-year-olds, and DFTD was present within the population.

"The previous trapping and monitoring that we did looked closely at populations on a small scale over time," Sam said.

"We've assumed that what we're observing in the areas that we've monitored can be extrapolated out into a greater area. That's quite an assumption.

"But now we've got the cameras that can survey over larger areas with less effort. We can look in real time at exactly what is actually happening, rather than making assumptions." 🐾

Caught on camera

The use of remote cameras in February's survey was a pilot project to see whether this technique was suitable for large-scale surveys of Tasmanian devils.

Remote cameras provide an accurate, passive and non-invasive technique to detect devils (and other species), even when population numbers are low. They also require fewer resources and labour than conventional trapping surveys.

"This survey design can be applied across Tasmania," said Sam



Wildlife biologist Sam Thalmann caught on remote-sensor infra-red camera.

Thalmann, a wildlife biologist with the Save the Tasmanian Devil Program.

"The technique can inform on large-scale patterns of distribution of not only Tasmanian devils, but also quolls and feral cats. This is important as the Program monitors changes to the ecosystem in response to drops in devil numbers.

"We've had the survey verified by independent consultants so that the technique can be used in other areas which are data-poor. This information will help prioritise management actions such as island translocations, Insurance Population, fencing (virtual islands), and the possible development of vaccines and treatments." 🐾

DEVILISH FOLK

The diversity of expertise among members of the Save the Tasmanian Devil Program plays an important role in furthering our knowledge. Our quarterly newsletter gives us the opportunity to introduce members of the team.

It's not unusual for members of the Save the Tasmanian Devil Program to find themselves in some pretty amazing locations. But William Oliver, a Discovery Ranger with the Tasmania Parks and Wildlife Service, is taking the message of conservation to the high seas—well, at least Bass Strait.

This year William has been working on board the passenger ship Spirit of Tasmania (a shipping service that runs between Tasmania and mainland Australia). He gives entertaining and informative presentations on Tasmanian wildlife and national parks, working alongside the crew from Creature Tales, which is a Tasmanian collective of artists and interpretive presenters.

“A subject that I hold close to my heart is the Tasmanian devil,” he said. “I use my time on board to highlight the importance of devils, and to let people know that they're a misunderstood and intriguing animal.

“I also team up with the Creature Tales face painters, who paint the faces of all ages (including adults) with Tasmanian wildlife. It's great doing a show and



Devilish Spirit: Discovery Ranger William Oliver is making quite an impression with tourists.

having loads of devils in the audience.”

Holding a Science Degree in Animal Science, Behaviour and Welfare (Hons), UK-born William is uniquely qualified to be talking to tourists about Tasmania's wildlife.

His Degree from the University of Plymouth, (which is in the south-west of the UK), featured an optional

placement year. William used the opportunity to travel to Boyup Brook, near Perth, WA, to work with kangaroos, wallabies and reptiles, before heading to Christmas Island to work with the red crabs for six months.

During this time William met a couple of Tasmanian scientists who mentioned the volunteering opportunities within the Save the Tasmanian Devil Program and the Parks and Wildlife Service. Today, William uses pictures and videos from his time with the Program's monitoring field trips to help educate and inspire passengers about wild devils.

“This work gives me the chance to highlight the importance of Tasmania as a refuge for many species that are in peril on the mainland due to introduced predators such as foxes, cats and dogs,” he said.

“Empowering people and letting them know that they can do something to help Tasmanian wildlife gives me great job satisfaction. Simple actions such as slowing down at night between dusk and dawn, and reporting devil road kill, can really help our furry friends.” 🦊

International prize donated to tsunami survivors

Tasmanian scientist Anne-Maree Pearse, who won a prestigious Japanese award for her breakthrough-research into the Devil Facial Tumour Disease (DFTD), has donated her prize money to the victims of the recent Japanese earthquake and tsunami.

Anne-Maree, who works at the State Government's Mt Pleasant Animal Health Laboratory, won the Prince Hitachi Prize for Comparative Oncology—an annual award bestowed by the brother of Japan's Emperor Akihito. The Prince Hitachi Prize is presented by the Japanese Foundation for Cancer Research.

“I was very honoured to receive the award,” said Anne-Maree, “in particular

as a representative of the dedicated group of scientists who have worked desperately over the past seven years to find some way of helping our devils.

“But about a month after I won, I saw the pictures on TV of the Japanese tsunami. I was so distressed for the Japanese people that I decided to donate my prize—1 million Yen (approx. AUD\$12,500) and return business-class airfares to Japan—to a survivor's fund.

“I know that in the minds of many of us the immediate horror of the earthquake is fading, but the horror will live on for years for those people. When I saw that it was snowing on people who'd lost their homes and their family... it finished me off.”

Anne-Maree's research helped identify that DFTD is not caused by a virus or bacteria but by a transmissible line of cancer cells passed from one devil to the next by cell implantation, such as when they bite one another. Her findings were published in the international science journal, Nature.

Anne-Maree also discovered that DFTD is mutating in the wild—faster than devils can adapt.

“Ms Pearse's discovery is epoch-making,” said the judges of the Prince Hitachi Prize. “She has greatly contributed to the establishment of the novel concept of Infectious Cancer, which has modified the traditional understanding of cancer.” 🦊

Fourth FRE to be 'heaven for devils'

A fourth Devil Island Free Range Enclosure (FRE) is to be built within Tasmania, the Save the Tasmanian Devil Program recently announced. The 10ha enclosure will be built by the Program on land owned by Tasmania Zoo, who will take over management of the facility once it's up and running.

The idea behind these large-scale enclosures is to allow devils to retain their wild behaviours. This is particularly important given the Program's 50-year plan to maintain a disease-free population that could, if ever needed in the future, be re-introduced back into the wild.

Robert Warren, the operations manager of Tasmania Zoo, said the Launceston site of the future FRE will be a 'heaven for devils'.

"The land is dense and wild, with wattle and eucalypt coverage and a moist forest feel," he said. "It's real Tassie bush—the type that covers you in leeches when you walk through it.

"But the greatest advantage of this site is that it's located next to Tasmania Zoo. The 'Devil Island' FRE will be side by side with our devil breeding program, which is one of the world's largest, as well as our holding facilities, which are soon to be open to the public."

Tasmania Zoo's devil conservation and



Location, location: Tasmania Zoo's operations manager, Robert Warren, said a feature of the fourth FRE is that it will be side by side with their devil breeding program.

breeding program, Devil's Heaven, was recently granted \$37,000 under the Tasmanian Devil Conservation Grant Scheme (which was established by the Save the Tasmanian Devil Program and is administered by the Zoo Aquarium Association's Wildlife Conservation Fund).

Our Program has a valued and long-standing relationship with Tasmania Zoo. In 2004, Tasmanian Zoo agreed to adopt and raise the orphaned devils of mothers with the Devil Facial Tumour Disease.

At the time, it was a big risk. No-one knew if the babies would have been infected by their mothers. But the transmission trial confirmed that mothers don't pass on DFTD to their young and today the descendants of these devils remain disease-free.

While the Tasmania Zoo 'Devil Island' FRE is going to be 10ha, Robert said they have room for additional and larger FREs, if ever required by the Program.

"We've got more than 200ha of wild bushland here, and the Zoo takes up only about 20ha," he said.

"Devils love this bush, so it leaves a lot of room for future FREs."

Tasmania Zoo believes that the latest FRE can be built by September this year (hopefully corresponding with Threatened Species Day).

The Devil Island Project group has now been instrumental in locating land and generating funds for the construction of three Devil Island FREs, which are all currently holding Insurance Population devils in Tasmania. The first, a 12ha Devil Island was opened at Bicheno in 2008 by Bruce and Maureen Englefield (East Coast Natureworld); a 22ha FRE was built at Bridport last year and the latest to be completed, a 22ha Devil Island FRE on the Freycinet Peninsula, was opened by the Minister in April this year.

Last January, 15 Insurance Population animals were also sent by the Program to Devil Ark, a large-scale enclosure at Barrington Tops, in NSW. An additional 20 captive-bred devils were moved from the Australian Reptile Park, in Gosford, NSW, to help kick-start the project. 🦘

Maria Island surveys continue

Remote camera surveys continue to be conducted on Maria Island as part of ongoing background investigations into the translocation proposal.

Maria Island—a 20km-long National Park which lies off the east coast of Tasmania—has been suggested as a possible disease-free devil sanctuary. As background to the proposal's evaluation process, wildlife biologists from the Save the Tasmanian Devil Program have been gathering information on all aspects of the Maria Island landscape (including

species distribution).

Jono Ricciardello, a senior field officer with the Program, said the most recent trip was to sample for small- and medium-sized mammals in remote (and recently unsurveyed) areas of the Island.

"Analysis of the data collected by the cameras revealed that small- to medium-sized mammals are generally widespread across the island," he said.

"We've 'captured' bandicoots, potoroos

and pademelons at various locations, as well as wombats, little penguins, Bennett's wallabies, and a pair of very curious Southern Boobooks."

"This survey is just one piece in the puzzle of examining the potential of introducing an Insurance Population of devils to Maria Island," Jono said.

"Having an in-depth knowledge of what species occur on the island will enable a thorough and rigorous assessment of the likely impacts of a devil introduction, and also provide an indication of the food resource that would be available". 🦘

SAVE THE TASMANIAN DEVIL APPEAL



Grab a Helping Hand

In response to public demand, a third series of the delightful Helping Hands fine art prints have been produced by Vanessa Quilliam, from Grasstree Art Studio at Coles Bay, Tasmania.



Helping Hands Series 3 has been produced as a limited edition of 500, with a percentage of the proceeds going to the Save the Tasmanian Devil Appeal. From the release of the first two limited-edition series (which were both limited to 500 prints each) a total of \$5,000 was raised for research into the Devil Facial Tumour Disease (DFTD).

As an East-Coast resident, Vanessa became aware of DFTD when wildlife biologists began tracking its spread across the State, and particularly in the Coles Bay area.

“Since I’m an artist, I thought I could do something to raise awareness, as well as money,” she said.

“I’m a huge believer in the arts for conservation. I like to be able to produce work to give something back to the projects that are important to me.” Helping Hands Series 3 prints are produced on the highest quality acid-free paper. Created with Epson Pigment inks, these archival-quality artworks have a prints permanence rating of more than 60 years.

Helping Hands Series 3 can be purchased from gift shops across Tasmania. For information on a stockist near you, contact Vanessa on (03) 6257 0064. 🦊

Tassie kids show their true colours

Eight life-sized Tasmanian devil coin collection sculptures were recently given a makeover by the winners of the Save the Tasmanian Devil Appeal’s ‘Decorate a Devil’ competition.

During the recent summer holidays, Tasmanian children were invited to take part in the Appeal’s Kids’ Club competition to redecorate the Tasmanian devil donation sculptures.

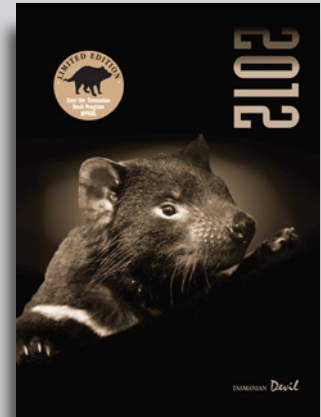
Bunnings Warehouse donated the location, paints and materials... the

sculptures were repaired with the assistance of Minty’s Bodyworks... and the talent was lavished by the kids of Tasmania.

The sculptures will be flown from Hobart International Airport to domestic terminals in eight capital cities around Australia.

To see the delightful winning entries in the ‘Decorate a Devil’ competition, go to: www.tassiedevil.com.au and select ‘Kids’ Club’. 🦊

PLAN to save the Tasmanian devil



‘Plan to save the Tasmanian devil’ has become the catch-cry of Collins Debden—Australia’s leading producer of diaries, planners and organisers—with the announcement of their new partnership with the Save the Tasmanian Devil Program Appeal.

This partnership with Collins Debden will take the message about the plight of the devil to millions across the world.

“Now and then you have the opportunity to make a difference,” said Collins Debden managing director, Steve Ferretti.

“Collins Debden wants to help Australia avoid what could only be described as a national tragedy if we allow this animal to be lost.”

The arrangement will feature in-store promotions and fundraising by Collins Debden, their customers, and the general public. The Collins Debden catalogue of diaries and planners for 2012 will include a gorgeous limited edition diary that features a devil on the cover. 🦊

